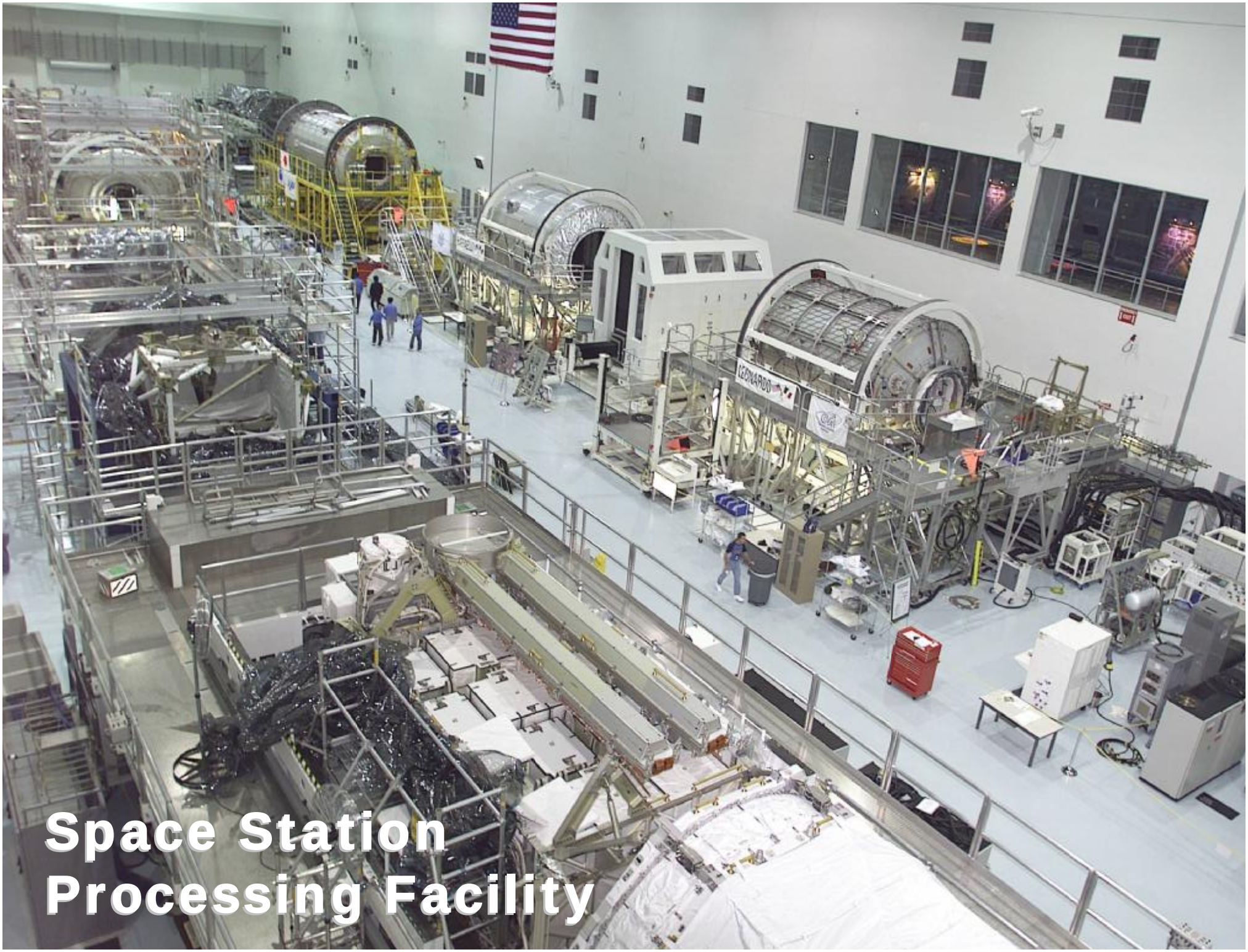
Space Station
Processing Facility

National Aeronautics and Space Administration

Return to Flight
SPOTLIGHT

Issue 6

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Cover photo: View of the Space Station Processing Facility High Bay and various International Space Station elements.

The Space Station Processing Facility (SSPF) is the central pre-flight checkout and processing point for flight elements of the International Space Station. It has 457,000 square feet (42,455 square meters) of space, including 63,000 square feet (5,853 square meters) dedicated to payload processing. The processing areas, airlock, operational control rooms, and laboratories were designed to support non-hazardous Station and Shuttle payloads in 100,000 class clean work areas.

Prominent features include a 46,000-square-foot high bay and a 17,000-square-foot low bay; 19 off-line labs within the clean work area; air bearing compatible flooring and pallets; air locks and personnel air showers; high communication rate fiber optic LAN; perimeter tunneling and catwalks to accommodate utilities; and energy efficient, computer-controlled air conditioning, heating, and lighting equipment. The Test, Control, and Monitoring System (TCMS) controls pre-launch checkout of the flight element hardware and software. A vapor containment facility was added to support the processing of the ISS ammonia coolant. There is also an observation window for public tours to observe the payload processing teams during their daily operations.

Since becoming operational, the SSPF has seen significant activity, beginning with processing of the Russian docking module which enabled the Space Shuttle to dock with the Russian space station MIR. In 1997 the first United States elements for the ISS began processing in the SSPF, notably: Z1 and P6 (the first trusses), Node 1 "Unity," the US Laboratory "Destiny," US Airlock "Quest," the space station arm (SSRMS), and three pressurized mating adapters (PMA), which are the ISS docking ports for the Shuttle. Three multiple element integrated tests have been conducted in the SSPF, most recently MEIT 3, testing the large inboard trusses: S0, S1, and P1 using TCMS and US Lab flight emulator equipment. The Multipurpose Logistics Modules (MPLM) and ISS racks are processed here, (MPLMs having flown to ISS and returned six times) and international elements from JAXA and ESA, along with Node 2 and Node 3, will dominate the floor space until launched later this decade.

- **SSPF is located in the KSC industrial area, just east of the Operations and Checkout and NASA KSC Headquarters buildings.**
- **Construction began in 1991 and was completed in 1995**
- **SSPF lobby displays flags of the ISS Partners**

For more information, visit the NASA website at http://www.nasa.gov